

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of :
Junya NISHIZAKA et al. : Attn: BOX PCT
Serial No. NEW : Docket No. 2001-1723A
Filed November 30, 2001 :

COPY PROTECTION METHOD AND
DIGITAL BROADCAST RECEIVER
[Corresponding to PCT/JP01/02734
Filed March 30, 2001]

PRELIMINARY AMENDMENT

Assistant Commissioner for Patents,
Washington, DC 20231

Sir:

Prior to examination of the above-referenced U.S. patent application please amend the application as follows:

IN THE SPECIFICATION

Please amend the specification as follows:

Please replace the paragraph beginning at page 12, line 8, to line 15, with the following rewritten paragraph:

Therefore, there can be provided a digital broadcast receiver which can output a component video signal subjected to copy protection of inverting a luminance signal and superimposing a luminance signal inversion indication signal indicating that the luminance signal is inverted, upon the horizontal blanking interval of the color-difference signal, when copy-inhibited video data is inputted.

IN THE CLAIMS

Please amend the claims as follows:

9. (Amended) The copy protection method of Claim 1 wherein
when the copy inhibition information is superimposed upon the first color-difference signal
and the copy inhibition information superimposition indication signal is superimposed upon the
second color-difference signal, they are superimposed at irregular intervals.

10. (Amended) The digital broadcast receiver of Claim 2 comprising:
an additional signal control unit for, when the copy inhibition information is superimposed
upon the first color-difference signal and the copy inhibition information superimposition
indication signal is superimposed upon the second color-difference signal, performing control for
superimposing the same at irregular intervals.

Please add the following new claims:

21. The copy protection method of Claim 3 wherein
when the copy inhibition information is superimposed upon the first color-difference signal
and the copy inhibition information superimposition indication signal is superimposed upon the
second color-difference signal, they are superimposed at irregular intervals.

22. The copy protection method of Claim 5 wherein
when the copy inhibition information is superimposed upon the first color-difference signal
and the copy inhibition information superimposition indication signal is superimposed upon the
second color-difference signal, they are superimposed at irregular intervals.

23. The copy protection method of Claim 7 wherein
when the copy inhibition information is superimposed upon the first color-difference signal
and the copy inhibition information superimposition indication signal is superimposed upon the
second color-difference signal, they are superimposed at irregular intervals.

24. The digital broadcast receiver of Claim 4 comprising:

an additional signal control unit for, when the copy inhibition information is superimposed upon the first color-difference signal and the copy inhibition information superimposition indication signal is superimposed upon the second color-difference signal, performing control for superimposing the same at irregular intervals.

25. The digital broadcast receiver of Claim 6 comprising:

an additional signal control unit for, when the copy inhibition information is superimposed upon the first color-difference signal and the copy inhibition information superimposition indication signal is superimposed upon the second color-difference signal, performing control for superimposing the same at irregular intervals.

26. The digital broadcast receiver of Claim 8 comprising:

an additional signal control unit for, when the copy inhibition information is superimposed upon the first color-difference signal and the copy inhibition information superimposition indication signal is superimposed upon the second color-difference signal, performing control for superimposing the same at irregular intervals.

REMARKS

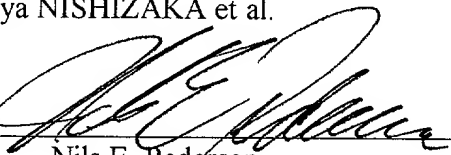
The above amendments have been made to make minor editorial changes so as to generally improve the form of the specification.

Furthermore, the present Preliminary Amendment is submitted to delete the multiple dependency of the claims, thereby placing such claims in condition for examination and reducing the required PTO filing fee.

Attached hereto is a marked-up version of the changes made to the specification and claims by the current Preliminary Amendment. The attached page is captioned "Version With Markings to Show Changes Made".

Respectfully submitted,

Junya NISHIZAKA et al.

By 

Nils E. Pedersen

Registration No. 33,145

Attorney for Applicants

NEP/krl
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
November 30, 2001

THE COMMISSIONER IS AUTHORIZED
TO CHARGE ANY DEFICIENCY IN THE
FEES FOR THIS PAPER TO DEPOSIT
ACCOUNT NO. 28-0975

Version with Markings to
Show Changes Made

detecting whether input video data is copy inhibited or not; a luminance signal inversion unit for inverting a luminance signal when the copy guard detection unit detects that the video data is copy inhibited; and an information addition unit for superimposing a luminance signal inversion indication signal indicating that the luminance signal is inverted, upon a horizontal blanking interval of a color-difference signal.

Therefore, there can be provided a digital broadcast receiver which can output a component video signal subjected to copy protection of inverting a luminance signal and superimposing a luminance signal inversion indication signal indicating that the luminance signal is inverted, upon the horizontal blanking interval of [the luminance signal to] the color-difference signal, when copy-inhibited video data is inputted.

According to Claim 17, there is provided a copy protection method for a component video signal which is composed of a luminance signal and two color-difference signals, comprising steps of: superimposing copy inhibition video which interferes with video, upon a start part or an end part of a video effective period of a field, and delaying or advancing a start position of a normal video signal by the superimposed copy inhibition video; superimposing, upon a vertical blanking interval of the luminance signal or one or both of the color-difference signals, a copy inhibition video superimposition indication signal

6. The digital broadcast receiver of Claim 2 comprising:
a color-difference signal composition unit for, after the copy inhibition information is superimposed upon the first color-difference signal and the copy inhibition information superimposition indication signal is superimposed upon the second color-difference signal, in field units, composing the superimposed color-difference signal of a field and a color-difference signal of an immediately preceding field.

7. The copy protection method of Claim 1 wherein
after the copy inhibition information is superimposed upon the first color-difference signal and the copy inhibition information superimposition indication signal is superimposed upon the second color-difference signal, in line units,
the superimposed color-difference signal of each line and a color-difference signal of an immediately preceding line are composed.

8. The digital broadcast receiver of Claim 2 comprising:
a color-difference signal composition unit for, after the copy inhibition information is superimposed upon the first color-difference signal and the copy inhibition information superimposition indication signal is superimposed upon the second color-difference signal, in line units, composing the superimposed color-difference signal of a line and a color-difference signal of an immediately preceding line.

9. The copy protection method of ^{Claim 1} any of Claims 1, 3, 5 and

7] wherein

when the copy inhibition information is superimposed upon the first color-difference signal and the copy inhibition information superimposition indication signal is superimposed upon the second color-difference signal, they are superimposed at irregular intervals.

10. The digital broadcast receiver of ^{Claim 2} any of Claims 2, 4, 6 and 8] comprising:

an additional signal control unit for, when the copy inhibition information is superimposed upon the first color-difference signal and the copy inhibition information superimposition indication signal is superimposed upon the second color-difference signal, performing control for superimposing the same at irregular intervals.

11. A copy protection method for a component video signal which is composed of a luminance signal and two color-difference signals, comprising steps of:

on a digital broadcast transmitting end, inverting a synchronizing signal included in the luminance signal;

on a digital broadcast receiving end, when it is detected that the synchronizing signal is inverted, inverting the synchronizing signal again to obtain the original signal; and

on a recorder end, when it is detected that the synchronizing signal is inverted, carrying out a copy inhibition process without performing recording.

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of : ATTN: BOX PCT
Junya NISHIZAKA et al. : Docket No. 2001-1723A
Serial No. NEW :
Filed November 30, 2001 :

COPY PROTECTION METHOD AND
DIGITAL BROADCAST RECEIVER

NOTICE RE PROPOSED DRAWING AMENDMENTS

Assistant Commissioner for Patents,
Washington, D.C.

Sir:

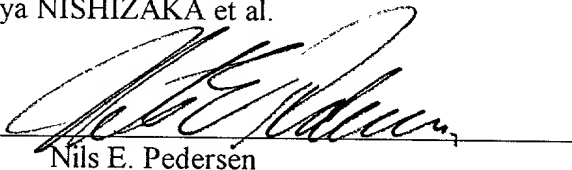
Enclosed herewith is a photocopy of Fig. 12 marked in red to indicate proposed drawing amendments thereto.

The Examiner is requested to approve such proposed drawing amendments, and after allowance of this application, formal drawings incorporating such amendments will be filed.

Respectfully submitted,

Junya NISHIZAKA et al.

By



Nils E. Pedersen
Registration No. 33,145
Attorney for Applicants

NEP/krl
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
November 30, 2001

THE COMMISSIONER IS AUTHORIZED
TO CHARGE ANY DEFICIENCY IN THE
FEES FOR THIS PAPER TO DEPOSIT
ACCOUNT NO. 23-0875

Fig.12

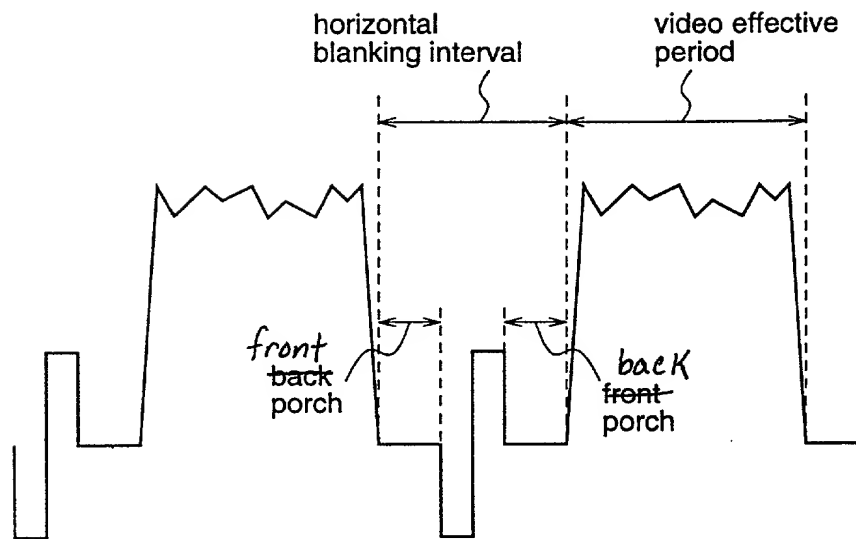


Fig.13

